APPENDIX D: FEDERAL AGENCY MANDATES AND RESPONSIBILITIES IN THE MARINE ENVIRONMENT

FEDERAL AGENCY MANDATES AND RESPONSIBILITIES IN THE MARINE ENVIRONMENT

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U.S. DEPARTMENT OF AGRICULTURE

U.S. FOREST SERVICE

The U.S. Forest Service (USFS) is primarily responsible for the management of the National Forest System and is generally responsible for maintaining forested lands in appropriate forest cover. The USFS manages National Forest System resources, including range, fish, wildlife, and water supplies, as well as provides watershed and habitat protection, and recreational uses. The USFS manages its aquatic and riparian resources pursuant to federal environmental legislation, as well as by individual Forest Land and Resource Management Plans. Approximately 20 percent of California's land is managed by the USFS.

Ocean-Related Responsibilities. The USFS manages national forests which are adjacent to the coast and that are in major river watersheds which drain into coastal waters. Although the USFS has no direct ocean resource management responsibilities, national forest land management involves the leasing and harvesting of timber, and construction of roads to permit timber harvesting, mining, and grazing. The conduct of these activities impact the spawning and rearing habitats of anadromous fish, including the endangered winter-run chinook salmon. The federal Endangered Species Act of 1973 (hereafter FESA; 16 U.S.C.A. Sec. 1531 et seq.) requires each federal agency to ensure that any action authorized, funded, or carried out by that agency is not likely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of habitat of those species which is determined by the Secretary of the Interior to be critical.

U.S. NATURAL RESOURCE CONSERVATION SERVICE

Previously the Soil Conservation Service, the Natural Resource Conservation Service (NRCS) was established under the authority of the Soil Conservation Act of 1935 (P.L. 74-46). The NRCS promotes the conservation of soil, water, and related resources. The NRCS provides technical assistance to those who control California's non-federal lands. These services are delivered through more than 100 local Resource Conservation Districts (RCDs) in California using voluntary approaches. The NRCS provides technical and financial assistance to farmers, ranchers, and state and local governments to reduce soil erosion and sedimentation, prevent flood damages, conserve water and improve water quality, reduce energy requirements, and assure agricultural productivity.

Ocean-Related Responsibilities. Although the NRCS has no direct ocean resource management responsibilities, it uses a watershed-based approach for managing resources, emphasizing upstream land treatment as the means to improve downstream water quality, reduce erosion and flooding, and increase biological diversity. The NRCS uses the Coordinated Resource Management and Planning (CRMP) process to voluntarily bring together interested parties for managing natural resources.

Examples of watershed protection projects used to improve California's ocean and coastal resources include the Arroyo Grande, Santa Rosa Creek and Santa Ynez projects completed over the past 40 years. The NRCS also participates in current California projects, including the San Francisco Bay Estuary Project, Strawberry Hills Project (tributary to the Elkhorn Slough National Estuarine Sanctuary), and the Morro Bay Watershed Project (to protect the Morro Bay Estuary). These projects reduce erosion, reduce plant nutrients, pesticides, and salinity/selenium which reach coastal waters, and lessen upstream flooding of agricultural and urban areas.

U.S. DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

The National Oceanic and Atmospheric Administration (NOAA) was formed on October 3, 1970 by Reorganization Plan No. 4 (5 U.S.C. app.). The NOAA is dedicated to long-term stewardship of the marine and air resources of the Earth. The NOAA's mission is to observe, describe, and predict the natural variability of the global Earth system--the ocean, the atmosphere, and features of the solid Earth and near space environment--and to detect any changes in the Earth system caused by human activity. The NOAA's general responsibilities include:

- conservation of marine living resources and protected species, and associated services to the fishing industry;
- oversight of atmospheric and hydrological resources;
- marine environmental assessment, management, and resource restoration;
- production of comprehensive environmental science data; and
- leadership in research and education in the Earth sciences to serve the economy.

Ocean-Related Responsibilities. The NOAA conducts a comprehensive and integrated program of marine policy, ocean, atmosphere, and Earth data collection and resource management, and provides grants for research, education and advisory services. Also, pursuant to the Ocean Dumping Act, NOAA prohibits the dumping of any material in ocean waters which would unreasonably degrade or endanger human health or the marine ecosystem. The five divisions within the NOAA are the National Environmental Satellite, Data, and Information Service; National Marine Fisheries Service; National Ocean Service; National Weather Service; and Office of Oceanic and Atmospheric Research.

National Environmental Satellite, Data, and Information Service. The National Environmental Satellite, Data, and Information Service (NESDIS) provides monitoring of the Earth's surface and space environment conditions, near-continuous observations of the Earth's Western Hemisphere, and improved oceanic and atmospheric observations and data dissemination capabilities. The NESDIS collects climatology, oceanography, and volcanology information for other data centers within the NOAA that use it for research and management of the marine environment, as well as provides environmental data and information products and services to the general public, federal, state, and local agencies.

The NESDIS collects information largely by satellite, including the GOES 7 and Landsat 6 satellites, and is useful in making assessments in the marine environment for such coastal and ocean water characteristics as salinity, turbidity, pigments, current circulation, sediment transport, and measuring overall change in global ocean dynamics.

National Marine Fisheries Service. The National Marine Fisheries Service (NMFS) manages the sea's living resources between three and 200 miles seaward of the U.S. coast. The primary responsibilities of the NMFS are set out in four pieces of legislation:

- 1. The Magnuson Fisheries Conservation and Management Act (Magnuson Act) for fisheries resources in the 200-mile U.S. Exclusive Economic Zone;
- 2. The Marine Mammal Protection Act for monitoring, protection, and management of marine

mammal stocks in U.S. waters;

- 3. The FESA for monitoring and protection of marine life considered to be at risk of extinction; and
- 4. The Fish and Wildlife Coordination Act for many habitat related issues.

The NMFS mission is accomplished through a strategy that includes the following objectives: rebuild overfished stocks, maintain productive fisheries, advance fishery forecast and ecosystem models, integrate conservation of protected species and fisheries management, improve seafood safety, improve living marine resources habitat protection, improve the effectiveness of international fisheries relationships, and improve opportunities of U.S. aquaculture.

Mandates of the Magnuson Act are administered by regional fishery management councils. Using Fishery Management Plans (FMPs), these councils provide coordinated management of many marine and anadromous fisheries inside three miles by NMFS, State, and /or Tribal authorities. Responsibilities for salmon management are especially complex, as the NMFS has primary responsibility in ocean waters and the State in fresh waters. Salmon "listed" under the FESA, however, involve NMFS management in freshwater habitats as well. The NMFS is also involved in freshwater salmon management issues as they pertain to habitat protection responsibilities.

Federally permitted dredge and fill operations and other habitat alterations that could effect marine resources also involve NMFS in an advisory role. Additionally, NMFS has lead management responsibility for all marine mammals except sea otters, walrus, manatees/dugongs, and polar bears, which all come under the authority of the U.S. Fish and Wildlife Service (USFWS). Sea turtles (at sea) are under the FESA authority of NMFS, while seabirds are within the purview of the USFWS.

National Ocean Service. The National Ocean Service (NOS) maintains accurate nautical charts, tide and tide current prediction aids, and other services to aid in the navigation and ocean passage of U.S. coastal waters. The NOS maintains the National Geodetic Reference System for mapping and charting, measures global ocean characteristics and conditions such as long-term sea level change, and manages estuarine sanctuaries and research programs. The NOS also responds to releases of oil and hazardous materials. Specific programs within the NOS include:

Coastal Nonpoint Source Pollution Program. In the 1990 amendments to the Coastal Zone Management Act, Section 6217 authorized the establishment of the Coastal Nonpoint Source Pollution Program to reduce nonpoint sources of pollution in coastal waters. This program is intended to target all polluted run-off sources including agriculture, stormwater drainage, and other sources that are a result of land use activities. Section 6217 requires states with approved coastal management programs to develop a Coastal Nonpoint Source Pollution Control Program. Both the NOAA and U.S. Environmental Protection Agency (USEPA)administer this program. The NOAA also provides procedures for state inland coastal boundaries to be modified to the extent necessary to control the land and water uses that have a significant impact on coastal waters of the state.

National Estuarine Research Reserve System. This program focuses on the protection and management of estuarine resources, environmental education and interpretation, and monitoring and research within designated estuaries. In California these reserves include Elkhorn Slough, the Tijuana River Estuary, and a potential site in the San Francisco Bay Area (currently being studied for designation).

National Marine Sanctuaries Program. This program designates and manages activities in marine sanctuaries. Within this program, the Sanctuaries and Reserves Division is responsible for administrating four National Marine Sanctuaries in California: the Monterey Bay, Gulf of the Farallons, Channel Islands, and Cordell Bank Sanctuaries. These sites were selected because they

possess conservational, recreational, ecological, historical, research, educational, and/or aesthetic qualities which give them special national, or in some instances international, significance.

Ocean Resources Conservation and Assessment Program. The Ocean Resources Conservation and Assessment (ORCA) program provides for the direction, synthesis, and delivery of scientific and technical information to improve decision-making for coastal and ocean ecosystem management. This work is essential in order to place the best available information and tools at the fingertips of coastal and marine resource managers in a timely manner. The ORCA consists of the following programs:

Strategic Environmental Assessment Program (SEAP). The SEAP collects, synthesizes, and distributes comprehensive information on the resources of the coastal ocean to identify compatibilities and conflicts among multiple uses and to help determine research and management needs and priorities. The SEAP publishes a series of thematic atlases of major regions of the U.S. Exclusive Economic Zone; maintains large data bases on the characteristics of coastal and estuarine areas (National Estuarine Inventory), the distribution of biological resources and habitats within these areas (Living Marine Resources Program and National Coastal Wetlands Inventory), and economic activities and their pollutant discharges (National Coastal Pollutant Discharge Inventory); and manages large scientific, environmental assessment programs concentrating on issues of coastal pollution, marine ecosystem integrity, coastal resource uses, and impacts from the Outer Continental Shelf (OCS) oil and gas developments and other hazardous materials.

NOAA National Status and Trends (NS&T) Program. The NS&T Program monitors the concentrations of toxic chemicals and trace elements in bottom-feeding fish, shellfish, and sediments at almost 300 coastal and estuarine locations in the United States; the objective is to determine the status and long-term trends of toxic contamination in these important areas. Samples are collected annually and are analyzed to determine levels of synthetic chlorinated compounds (e.g., DDTs), polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons (PAHs), and toxic trace elements (e.g., mercury and lead). This national program is the first to use a uniform set of techniques to measure coastal and estuarine environmental quality. A "specimen bank" of samples taken each year at about 10 percent of the sites is maintained at the National Institute of Standards and Technology for future analyses. A related program is examining the relationships between contaminant exposures and indicators of biological responses in fish and shellfish in areas shown by the NS&T monitoring results to have high toxic chemical levels.

Hazardous Materials Response and Assessment Program (HAZMAT). As the Scientific Support Coordinator to the U.S. Coast Guard (the Federal On-Scene Coordinator), the HAZMAT provides critical information on spill trajectory projections, chemical hazard analysis, and assessment of marine and estuarine sensitivity to spills, responding to about 100 spills per year. The HAZMAT uses the Computer-Aided Management of Emergency Operations (CAMEO) program designed to help emergency planners and first responders safely handle chemical accidents. CAMEO is currently used by over 5,000 fire departments throughout the nation. HAZMAT staff represent the Department of Commerce and NOAA on the National Response Team and selected regional response teams.

The HAZMAT's Coastal Resource Coordination program provides technical support in coastal ecology, environmental assessment of biological effects of contaminants, and environmental risk assessment to the USEPA's Superfund Program during emergency and remedial responses at, and for the cleanup of, hazardous waste sites in coastal areas. The ORCA, under its Comprehensive Environmental Resource, Conservation and Liability Act of 1980 (hereafter CERCLA; 42 U.S.C.A. Sec. 9601 et seq.) trustee responsibilities, works with EPA to address natural resource concerns at approximately 300 waste sites per year through its remedial process, and provides

recommendations for the most appropriate actions necessary to protect and restore natural resources.

Natural Resources Damage Assessment and Restoration Program. The Under Secretary for Oceans and Atmosphere acts on behalf of the Secretary of Commerce as a federal trustee for natural resources under the Superfund Act, the Water Pollution Control Act (commonly known as the Clean Water Act, 33 U.S.C.A. Sec. 1251 et seq.), the MPRSA, and the Oil Pollution Act of 1990 (33 U.S.C.A. Sec. 2701 et seq.). Under these laws, the NOAA acts on behalf of the public to assess and claim damages (compensation) from potentially responsible parties for injury to natural resources from discharges of oil or releases of hazardous substances. To implement resource restoration and trustee responsibilities in a timely and cost-effective manner, a Damage Assessment Center (DAC) works with the Office of General Counsel to conduct damage assessments and bring claims against potentially responsible parties. A Restoration Center was established within the NMFS to advise the DAC on the cost of feasible restoration alternatives to be used in the calculation of damages, and uses recovered damages to restore, replace, or acquire the equivalent of the injured resources.

Automated Geographic Information and Management Systems. A critical component to the solution of coastal environmental problems is the development, delivery, and use of scientifically sound information to resource managers. The ORCA is committed to transferring to the nation's coastal states a wide range of existing, but not readily available, coastal resource and environmental quality information, and state of the art, desktop information systems technology and capabilities. Information from ORCA national data bases is being integrated into user-friendly, geographic information and analysis systems: the CAMEO for on-scene emergency response management; the Computer Mapping and Analysis System (CMAS) for living marine resources; the Coastal and Ocean Management, Planning, and Assessment System (COMPAS); and GeoCoast, a multi-workstation, state-of-the-art geographic information system facility.

Office of Ocean and Coastal Resource Management. The Office of Ocean and Coastal Resource Management (OCRM) is the federal office responsible for implementing the Coastal Zone Management Act (statutory authority for both the National Coastal Zone Management Program and the National Estuarine Research Reserve System), the Deep Seabed Hard Minerals Resources Act, the Ocean Thermal Energy Conversion Act, and the National Marine Sanctuaries Act. In addition, OCRM is involved in a number of inter-agency working groups and initiatives at the local, state, regional and international levels.

The National Marine Sanctuary Program consists of discrete areas of the Nation's marine environment designated to promote comprehensive management of their ecological, historical, recreational and aesthetic resources. The Sanctuaries provide a secure habitat for species close to extinction and historically significant shipwrecks and prehistoric artifacts. The Sanctuaries also sustain multiple uses; they are cherished recreational spots for diving and sportfishing, and support valuable commercial industries such as fishing and kelp harvesting. The National Estuarine Research Reserve System is dedicated to fostering a system of Reserves that represents the wide range of coastal and estuarine habitats found in the United States and its territories. The Reserve System works with both federal and state authorities to provide long-term stewardship of these valuable areas. Research and education are also crucial. The Reserves serve as laboratories and classrooms where the effects of both natural and human activity can be observed. The National Coastal Management Program deals with stresses on all of the nation's coastal areas. The program is a unique, voluntary partnership of federal and state government to reduce conflicts between land and water uses in the coastal area and to protect the area's resources. To this end, the National Coastal Management Program promotes wise use of the valuable resources of the nation's shorelines, and seeks a balance between preservation and healthy economic development.

National Weather Service. The National Weather Service (NWS) issues warnings and forecasts of marine weather and sea conditions for U.S. coastal waters, the Great Lakes, offshore regions, and the

high seas to protect life and property. These services include issuance of tropical cyclone, coastal flood, and tsunami warnings to help reduce the damage associated with high water level inundation. The NWS meets its marine environmental responsibilities through a structure of national centers and field offices and by the dissemination of weather products to maritime interests.

National Centers: regional National Centers collect a variety of weather global weather observations and processes the data through ocean-forecast models to produce numerical analyses and forecasts, including tsunami, hurricane, and tropical warnings.

Field Offices: of the 52 national Weather Service Forecast Offices (WSFO) and about 200 smaller Weather Service Offices (WSO), 24 WSFOs and 60 WSOs have marine weather responsibilities which provide such services as the issuance of marine warnings and forecasts of general weather and sea conditions including coastal flood watches and storm surges for assigned segments of the U.S. coastline within and beyond the 200 mile EEZ.

Information from the national centers and field offices is also disseminated to a multitude of users including the NOAA Weather Radio Network, coastal public, and U.S. Coast Guard.

Office of Oceanic and Atmospheric Research. The mission of the Office of Oceanic and Atmospheric Research (OAR) is to improve NOAA environmental services, develop economically useful environmental technologies, and enhance national and international environmental stewardship by continually improving the monitoring, understanding, and predicting of changes in the oceans and atmosphere that envelop Earth, making it the "living planet." The OAR's mission also requires that it be responsible to the current NOAA mission while anticipating future NOAA responsibilities and environmental issues. Fulfilling this dual role requires balance and excellence within the OAR laboratories and an enduring partnership with the extramural research community.

The OAR has three major programs: the National Sea Grant College Program, the National Undersea Research Program, and a network of eleven Environmental Research Laboratories.

National Sea Grant College Program. This program supports considerable coastal and fisheries research and undertakes applied research and activities for translation into economic benefits. Examples of California Sea Grant activities include:

- developing low-cost techniques to measure pathogen levels in shellfish, which have enabled regulatory agencies to set less restrictive regulations for shellfish harvest closures, thus allowing more fishing. In some cases this has lead to temporarily, instead of permanentlyclosed beds;
- assisting in the development of a new low-cost propulsion system for fishing boats which uses liquified natural gas, and results in a significant savings in fuel costs;
- helping to rebuild a \$2 million sturgeon fishery in California through research that has lead to the development of a domestic white sturgeon brood stock; and
- establishing a program of research, education, and technology transfer to focus on oyster fisheries which has led to new domestic hatcheries and, with a combination of inexpensive seed and improved stocks, a \$20 million industry in California.

National Undersea Research Program. The National Undersea Research Program (NURP) provides in situ diving and submersible technology for federal and academic scientists conducting a wide variety of fisheries and ecological research (fishery habitats, recruitment processes, and stock

assessments) off California or directly applicable to California problems. For instance, the NURP has supported:

- research to study the seriously depleted groundfish stock in Monterey Bay. In situ observations show that very large, mature ground fish not found in commercial catches from the open bay are common in the local canyons. Researchers are tagging and tracking individuals to see if they leave the area and become available to the Bay fishery.
- developing and improving techniques for fisheries predictions. A visual method for assessing bottom fish populations is being developed for comparison with data collected by nets; the biases of both methods will be compared so better estimates of numbers of fish will result. Comparisons of flatfish populations, one of the most valuable fisheries showed that estimates from a Remotely Operated Vehicle were 2 to 3 times higher than those made using a beam trawl. This research shows that estimates made by traditional methods are too low and may fail to identify nursery grounds.

Pacific Marine Environmental Laboratory. Located in Seattle, Washington, the Pacific Marine Environmental Laboratory (PMEL) has responsibility for research along the Pacific coast and the Pacific open ocean. Programs of regional interest to California include:

- Tsunami Hazard Research: the OAR seeks to mitigate tsunami hazard to the Pacific coast by obtaining tsunami measurements in the deep ocean and coastal regions. The Pacific Tsunami Observation Program (PacTOP) at PMEL is working on tsunami modelling and tsunami inundation which will mitigate hazards for the Pacific coast.
- Fisheries Research: OAR fisheries research seeks to provide a scientific basis to manage fisheries to maximum yield by understanding the factors controlling variability in recruitment of stocks. A comparative approach is being used in order to develop conceptual models of the recruitment process which will be applicable to fisheries in diverse oceanic systems.
- ENSO and Climate Research and Forecasting: the NOAA is conducting observational and theoretical studies of the El Nino-Southern Oscillation condition in the ocean and atmosphere in order to simulate and predict this global interannual climate phenomenon. ENSO oceanic and atmospheric fluctuations are connected to the weather patterns over North America, the monsoon over India, and other aspects of climate all over the globe. The economic impacts of El Niño events are estimated in the billions of dollars; forecasts of up to a year in advance may soon be possible, enabling the United States and other countries to respond in agricultural and water resource planning as well as other areas.

U.S. DEPARTMENT OF DEFENSE

U.S. ARMY CORPS OF ENGINEERS

The Army Corps of Engineers (Corps) is a division of the Department of the Army. The Corps develops, controls, maintains, and conserves the nation's waterways and wetlands. The Corps regulates all construction projects in the navigable waterways of the United States by reviewing and approving any project involving fill, construction, or modification of offshore or coastal waters.

Ocean-Related Responsibilities. The Corps receives the majority of its authority/responsibilities from the River and Harbors Act, Section 10. The Act gives the Corps responsibility for developing, controlling, maintaining, and conserving the nation's water resources. Within 200 nautical miles, the Corps has permit authority over facilities sited in navigable waters in the United States, including the authority to plan, design and construct new port and harbor facilities or modify, improve and maintain existing ones. The Corps' authority extends to facilities involving chemicals, hard minerals, oil and gas, sand and gravel, water, commercial construction, defense and energy.

The Corps also implements and manages transportation, recreation, research, and resource protection projects, as well as plans and builds structures such as dams, reservoirs, waterways, and levees to protect areas from floods and to prevent coastal shoreline erosion. Additionally, under Section 10 of the River and Harbors Act, Section 404 of the Clean Water Act, and Section 103 of the MPRSA, the Corps has permitting authority to transport and discharge dredged or fill material into navigable waters of the United States.

U.S. NAVY

The U.S. Navy (USN) is the naval warfare department under the control of the Secretary of the Navy. The USN operates several naval shipyards in California and administers the land and adjacent waters of those shipyards.

Ocean-Related Responsibilities. The U.S. Navy has no direct ocean resource management responsibilities other than those imposed by the federal Clean Water Act and other laws regulating it as an owner of land and coastal waters, such as the Resource Conservation and Recovery Act of 1976 (42 U.S.C.A. Sec. 6901 et seq.), the CERCLA, and the Oil Pollution Act of 1990. Inasmuch as the USN has duties relating to contracts for the construction or conversion of vessels in the naval fleet, it is responsible for ensuring that construction meets standards for ship construction, especially as relating to hazardous waste and oil.

The USN also performs research on ocean waters and other ocean-related matters. For example, notwithstanding the Marine Mammal Protection Act, the USN is authorized to "take" not more than 25 marine mammals, other than threatened or endangered species, each year for national defense purposes with the concurrence of the Secretary for Commerce.

U.S. DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

The National Park Service (NPS) was established in the Interior Department in 1916. The goal of the National Park Service is to conserve the natural scenery, the wildlife, and natural and historic objects of the area. In addition, the National Park Service provides for the management of these resources for future generations. The Agency manages National Parks, monuments, historic sites, and recreation areas by developing and implementing park management plans.

Ocean-Related Responsibilities. While their responsibilities are not specifically ocean or coastal oriented, NPS manages four coastal and recreational parks in California: the Channel Islands National Park, Point Reyes National Seashore, the Golden Gate National Recreation Area, and Redwood National Park. Additionally, in order to effectively manage the park system, the Service conducts research to improve resource management. including for example, the issuance of permits for research on natural resources and archaeology, and the monitoring of resources and ecosystems within managed areas. Regarding resource protection and enhancement, the National Park Service engages in certain activities regarding marine mammal and endangered species protection, erosion control, and the reintroduction of native plants and animals in the area.

U.S. BUREAU OF LAND MANAGEMENT

In 1946 the U.S. Grazing Service was merged with the General Land Office to form the Bureau of Land Management (BLM) within the Department of the Interior. The BLM manages a wide array of resources and uses, including energy and minerals, timber, forage, wild horse and burro populations, fish and wildlife habitat, wilderness areas, and archaeological and historical sites. BLM's major legislative mandates are the Federal Land Policy and Management Act of 1976, the Taylor Grazing Act of 1934, the Mineral Leasing Act of 1920, and the Mining Law of 1872.

Ocean-Related Responsibilities. In California the BLM manages important coastal resources such as the King Range National Conservation Area (KRNCA) and offshore rocks and islands along the coast from Oregon to Mexico. The KRNCA contains over 35 miles of coastal beach front, an estuary, 40 miles of stream that flow directly into the ocean, and many ocean tide pools. Because of the important fish and wildlife values of the offshore rocks and islands, BLM transferred management responsibilities to the California Department of Fish and Game in 1983 through an MOU.

BLM also manages hundreds of miles of streams and their associated watershed that directly affect the coastal environment. For example, watersheds that BLM manages in the Klamath River Basin directly affect the water quality of the Klamath estuary which, in turn, affects the habitats of salmonid fishery stocks. The main objective in managing these watersheds is restoration and protection of water quality and fisheries.

U.S. BUREAU OF RECLAMATION

The Bureau of Reclamation develops water conservation plans, provides for the efficient and effective use of water related resources, and improves the management of existing water resources. Specifically, they engage in irrigation water service, hydropower generation, flood control, river regulation, and water quality improvement.

Ocean-Related Responsibilities. Although activities by the Bureau of Reclamation mainly concern onshore activities, certain of their activities ultimately impact the coastal environment. For instance flood control mechanisms potentially impact the water quantity and quality of rivers and coastal estuaries, which in turn impact the habitats of marine and salmonid fishery stocks.

U.S. FISH AND WILDLIFE SERVICE

In 1939, the U.S. Fish and Wildlife Service (USFWS) was created within the Department of Interior, as the agency responsible for protecting and conserving fisheries, wildlife (birds and most mammals) and their habitats for the benefit of the public. The USFWS monitors and implements programs for: the management of migratory birds and fish, national wildlife refuges and national fish hatcheries; restoration programs; the listing, protection, and development of recovery programs under the FESA for candidate species; and also comments on federal proposals and federally permitted projects. The USFWS also provides research and support for international negotiations regarding fisheries, migratory wildlife, and protected species.

The USFWS receives its authority from several federal statutes such as the Lacey Act (16 U.S.C. 667), Migratory Bird Treaty Act (16 U.S.C. 667), Clean Water Restoration Act (33 U.S.C. 466), Marine Mammal Protection Act (16 U.S.C. 1361), the Fish and Wildlife Coordination Act (16 U.S.C. 661-667), and the FESA. The USFWS also enforces international treaties and conventions such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Ocean-Related Responsibilities. The USFWS generally has jurisdiction over freshwater and estuarine fishes. Specifically, they have a regulatory role concerning federal activities with potential impact on certain marine mammals (Southern sea otter, manatee/dugong, polar bear, walrus), migratory birds, sea turtles on shore, freshwater fishes, and endangered species onshore or within National Wildlife Refuges. Concerning jurisdiction over threatened or endangered marine species, the NMFS holds jurisdiction over most marine mammals (whales, seals, and sea lions), anadromous (salmon) and marine fisheries, while the USFWS holds jurisdiction on inland and freshwater species, and seabirds.

The USFWS also monitors the levels of pesticides, heavy metals and contaminants in U.S. waters as they may affect USFWS trust resources. The agency engages in research and resource protection and enhancement. As mentioned previously, the USFWS administers several pieces of legislation that directly relate to marine protection. Under the FESA, the USFWS can halt a project requiring federal approval if the proposed project jeopardizes a threatened or endangered species under their jurisdiction. Therefore, any type of coastal planning requires attention to the location, habitat, and distribution of listed threatened and endangered species. Another act which offers significant protection to ocean resources is the Marine Mammal Protection Act of 1972, which prohibits the taking or importing of marine mammals or marine mammal products except under special permits.

U.S. GEOLOGICAL SURVEY

The U.S. Geological Survey (USGS) was established in 1879 in the Department of Interior for the purpose of providing for the "classification of public lands and the examination of the geological structure, mineral resources, and products of the national domain" (43 U.S.C. 31). In 1962, the USGS's authority was expanded to include activities outside the limits of the United States. The Primary responsibilities of the USGS are to investigate and provide access to the Nation's land, water, energy and mineral resources, and to conduct research on global change, investigate natural hazards, appraise water resources, and conduct the National Mapping Program.

Ocean-Related Responsibilities. The Outer Continental Shelf Lands Act (OCSLA), Submerged Lands Act and various Department of Interior mandates require that the U.S. Geological Survey provide geological, topographic, and hydrological information that contributes to the wise management of the nation's resources. Regarding hard mineral activities, the USGS seeks to develop descriptions of the geological settings of energy and mineral resources in offshore areas. Also, the USGS conducts programs to asses oil and gas resources in marine waters of the United States.

U.S MINERALS MANAGEMENT SERVICE

The Minerals Management Service was created by Secretarial Order on January 19, 1992, to implement the Outer Continental Shelf Lands Act.

Ocean Related Responsibilities. The Mineral Management Service (MMS), administers the Nation's oil and natural gas resources in the Outer Continental Shelf (OCS) located in the waters beyond three nautical miles from shore. The MMS manages the leasing, exploration, development, and production of these resources for the Federal government. Additionally, the MMS collects and disburses federal revenues paid for the extraction of hydrocarbon resources. The day-to-day administration of these programs for OCS lands offshore California, Oregon, and Washington are the responsibility of the Pacific OCS Region located in Camarillo, California.

The Minerals Management Service has established a multi-phase leasing process starting with the initial blueprint for offering OCS areas for leasing (Five Year Plan) to the specific development stages where oil is produced and transported to refinery destinations. Generally, the process includes the Five Year Leasing Plan to guide the size, timing, and location of OCS lease sales over a five year planning period. Then Lease Sales are held and mineral rights awarded to the highest bidders for a given lease parcel. After a sale has occurred and oil company has secured rights to a lease tract or tracts, the company must submit plans to the MMS on how it will explore for oil and gas resources. Assuming commercial quantities of oil and gas are discovered on the lease tract or tracts the company then submits a plan to develop the oil and gas resources from a production platform. As mentioned in the State agency descriptions, the California Coastal Commission has consistency review over the Lease Sale, plan of exploration, and plan of development phases administered by the MMS.

In accordance with a 1990 announcement by President Bush, the Final Five Year Oil And Gas Leasing Program 1992-1997 proposes no lease sales off the coastlines of California, Oregon, or Washington. Leasing within this region will be deferred until the year 2000. The MMS is currently preparing the next five year oil and gas program for 1997-2002.

The MMS has provided a significant funding source for marine and coastal research. Funding from 1974 through 1990 totaled more than \$78 million dollars for the Pacific OCS Region. The MMS Environmental Studies Program focuses on descriptions (or characterizations) of the marine and coastal environments and how they might be impacted by offshore natural gas and oil activities. Research is now funded on a wide range of environmental topics including: water quality, air quality, oceanography, marine mammals, seabirds, endangered species, ocean discharges, coastal recreation, as well as the social and economic impacts of OCS oil and gas activities.

DEPARTMENT OF TRANSPORTATION

U.S. COAST GUARD

The U.S. Coast Guard (USCG) is the federal government's primary maritime law enforcement agency. It is a branch of the armed forces under the jurisdiction of the Department of Transportation. However, in times of war, the Coast Guard operates as part of the U.S. Navy. Generally, the USCG enforces federal laws and treaties of the United States on the high seas and on federal waters. The USCG's missions include maritime law enforcement, national security, maritime safety and marine environmental protection.

Ocean-Related Responsibilities. For ocean and coastal activities, the USCG's responsibilities are stated in Title 14 of the United States Code. The USCG manages maritime transportation activities in order to minimize loss of life and damage to the environment. By establishing safety standards and conducting marine inspections, the USCG promotes safe navigation of waters in the United States.

The USCG has historically held the primary responsibility to ensure the clean-up of any spills of oil or other pollutants in the marine environment. To avert oil spills and to promote safety, the USCG inspects vessels carrying oil and other hazardous materials. It requires proof and issues certificates of responsibility to owners and operators of vessels that may be liable to the U.S. for the cost of removing oil and other hazardous materials from U.S. waters. The USCG requires vessels to have approved response plans detailing owner and operator response to an oil spill and insuring proper response activities.

Pursuant to the Oil Pollution Act of 1990 (OPA), which refined ground rules for dealing with oil pollution events and recommends pollution prevention measures, the USCG has responsibility for preparing most of the regulations necessary to implement the OPA. Additionally, the USCG must be consulted in the development of oil spill contingency plans for marine oil and gas facilities and terminals. The OPA also allows for natural resource damage recovery by federal and state resource trustees.

The Clean Water Act requires the USCG to enforce standards of oil or other hazardous waste discharge. The same authority regarding waste discharge into marine sanctuaries, rests also with the USCG, as stated in the MPRSA. Lastly, in the area of commercial and sport fishing, the USCG enforces U.S. fisheries laws, as well as vessel/boat safety regulations. For marine recreation, the USCG promulgates regulations to establish minimum boating safety standards.

U.S. MARITIME ADMINISTRATION

The U.S. Maritime Administration (MARAD) administers federal programs aiding the development, promotion, and operation of the United State Merchant Marine. The MARAD operates a merchant marine academy, a fire training center, and the reserve fleets of militarily useful vessels in Suisun Bay, California, Beaumont, Texas and Fort Eustis, Virginia. However, the USCG administers the merchant marine insofar as marine safety and seaman's welfare are concerned.

Ocean-Related Responsibilities. The MARAD has no direct ocean resource management responsibilities other than those imposed by the federal Clean Water Act and other laws regulating it as an owner of vessels in marine waters, such as the laws relating to oil spills and cleanup, and discharge of wastewater or hazardous materials.

In addition, inasmuch as the MARAD has duties relating to contracts for the construction or conversion of vessels in the maritime fleet, it is responsible for ensuring that construction meets standards for ship construction, especially as relating to hazardous waste and oil.

U.S. ENVIRONMENTAL PROTECTION AGENCY

In 1970, the U.S. Environmental Protection Agency (USEPA) was established as an independent agency within the executive branch. Two functions of the USEPA are 1) research and development and 2) abatement and control of pollution through a combination of research, monitoring, standard-setting, and enforcement activities. Through several mandates, such as the Clean Water Act and Clean Air Act (42 U.S.C.A. Sec. 7401 et seq.), USEPA is vested regulatory powers to ensure the protection and enhancement of the environment both presently and for the future. The USEPA also handles all legal and enforcement aspects of pollution violations, where appropriate.

Ocean-Related Responsibilities. Although the USEPA has no direct ocean resource management responsibilities, it administers and enforces various environmental protection statutes of general application, including the federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C.A. Sec. 136 et seq.), under which it registers and regulates the use of pesticides or approves state plans for that purpose. The products regulated include tributyltin, a component of ship bottom antifoulant paints, which has an adverse effect on nontarget marine life.

The USEPA administers the federal Clean Water Act, although individual State's generally have programs in place to control water pollution. Title III of the Act prohibits unlawful discharge of any pollutant, except under certain provisions, establishes effluent limitations and standards, provides for stringent control of point sources of pollution to surface waters, establishes reporting requirements to the USEPA, defines effluent standards and controls for toxic pollutants, and controls for sewage discharge from vessels. The State generally addresses violation of these measures; however, if the Sate takes no action, the USEPA orders compliance through injunction. The USEPA also administers the National Estuary Program to maintain the health and ecological integrity of U.S. Estuaries.

Both the Clean Water Act and MPRSA give the USEPA the authority to regulate waste disposal in coastal waters. Title IV of the Clean Water Act requires that either the USEPA or State issue permits to parties discharging point sources of pollution or sewage into navigable waters under special provisions of the National Pollution Discharge Elimination System. However, the ocean disposal of dredged or fill materials, falls under the authority of the Army Corps of Engineers, subject to USEPA guidelines and site selection. The MPRSA provides for the establishment of marine sanctuaries, and has provisions prohibiting ocean dumping, except under permit, into ocean waters seaward of the mean high tide.

The 1990 amendments to the Coastal Zone Management Act of 1972 authorized establishment of a Coastal Nonpoint Source Pollution Program to reduce nonpoint sources of pollution in coastal waters. This program is intended to target all polluted run-off sources including agriculture, stormwater drainage, and other sources that are a result of land use activities. Section 6217 requires states with approved coastal management programs to develop a Coastal Nonpoint Pollution Control Program. On the federal level, both the NOAA and USEPA administer this program.

U.S. FOOD AND DRUG ADMINISTRATION

The U.S. Food and Drug Administration (FDA) is an agency of the U.S. Department of Health and Human Services. The principal duty of the FDA is to administer the laws regulating the manufacture, branding, and use of drugs and commerce in foods, drugs, and cosmetics. The regional office also operates a seafood research laboratory in Seattle, Washington, in the Center for Food Safety and Nutrition, which conducts research relating to shellfish and imported foods.

Ocean-Related Responsibilities. Although the FDA has no direct ocean resource management responsibilities, it administers the federal Food, Drug, and Cosmetics Act (21 U.S.C.A. Sec. 301 et seq.), the purpose of which is to keep interstate channels free from deleterious, adulterated, and misbranded products not proven to be safe and effective for their alleged uses. Included in these responsibilities are the examination and inspection of seafood for shipment or sale, and the seizure of shellfish that are contaminated by harmful bacteria in the waters where they grow and that are deemed adulterated. Impacts on fish and shellfish contaminated by hazardous substance spills in ocean and coastal areas are administered as adulterated foods in an analogous manner.

Within the Center for Food Safety and Applied Nutrition is the Office of Seafood which is responsible for seafood-related activities, including oversight of seafood field inspection programs, and associated laboratories that process samples to determine tainted products; research and evaluation of hazards; and administering the National Shellfish Sanitation Program which seeks to maintain the safety of shellfish, and educates the industry on safe seafood processing and handling.

The FDA has a seafood hotline for consumers with questions regarding safe consumption of seafood (1-800-FDA-4010). The FDA is currently proposing a new concept in seafood safety, the Hazard Analysis Critical Control Point (HACCP) seafood regulation. This proposed regulation requires that the seafood industry adopt safety controls designed to ensure that their seafood products are as safe as possible for human consumption. The HACCP is a state-of-the-art system, once used by the private sector in developing safe food for astronauts. Among the many aspects of HACCP, it identifies likely hazards and "critical control points" where they could occur, as well as establishes monitoring procedures. The HACCP regulation is currently in review and will tentatively be effective February 1995.